



# THE FUSION OF SUSTAINABILITY AND AESTHETICS



LOW CARBON  
PRODUCTION



EXTREMELY  
DURABLE



100%  
RECYCLABLE

NEW: THE MOST  
SUSTAINABLE CON-  
STRUCTION ZINC  
IN THE WORLD

prePATINA Eco Zinc  
with 50% less carbon



#### PROPERTY

Leuphana University, Lüneburg, Germany

#### ARCHITECT OF DESIGN

Studio Libeskind, New York, USA

#### EXECUTIVE ARCHITECT

rw+ Architekten GmbH, Berlin, Germany

#### SHEET METAL CONTRACTOR

Blechtechnik Marco Pistorius GmbH, Lichtentanne, Germany

#### APPLICATION

Façade: Flat-lock tile system



### AESTHETICS WITH RESPONSIBILITY.

**Extremely low carbon footprint  
compared to other construction metals.**



### AESTHETICS THAT LAST.

**With titanium zinc from RHEINZINK,  
you are basically building for eternity.**



### AESTHETICS THAT RETURN.

**100% recyclability according to  
the Cradle to Cradle principle.**





The ever-growing human race can only maintain an environment worth living in if it effectively reduces the consumption of resources. First and foremost is the task of drastically reducing carbon emissions.

The EU wants to become climate neutral by 2050. There is no doubt that the construction industry also has a great responsibility. At RHEINZINK, sustainability has long been firmly anchored in the corporate strategy. What others are just discovering as an innovation, titanium zinc has already been for over 50 years: the building material of excellence for an architecture of sustainability.

In 2005, the German Federal Environment Agency had the five most important environmental indicators for various building metals calculated on the basis of publicly available, recognised data. The result is clear: zinc comes off best in all five categories examined.

1: UBA Texte 19/05, Dessau, 2005

*Unlike other construction metals, zinc has a very low melting point and thus already has a decent head start on other comparable materials.*

Dr. Marianne Schönnenbeck, Sustainability Officer at RHEINZINK



# WHAT MAKES SUSTAINABILITY REAL?

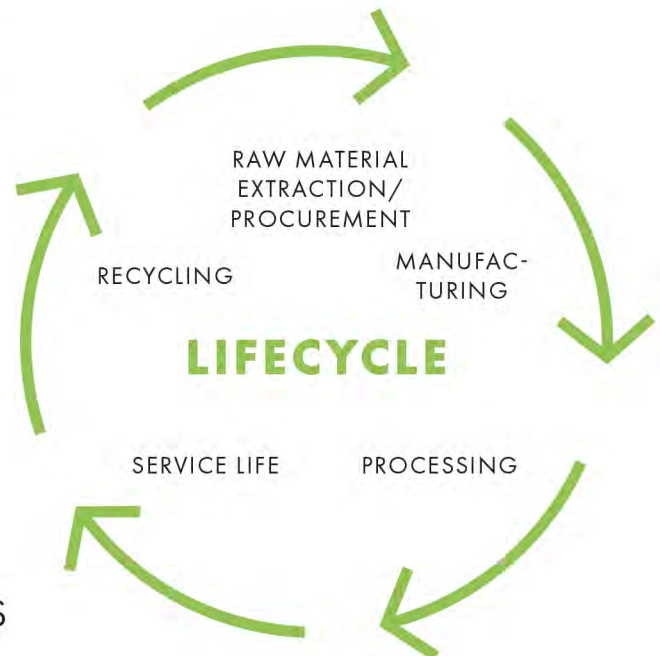
## The three pillars of sustainability of titanium zinc

**Sustainability is one of the most inflationary terms today – but also one of the most important. Thanks to its outstanding properties, titanium zinc from RHEINZINK is not only sustainable, but the definition of sustainability.**

### Small carbon footprint

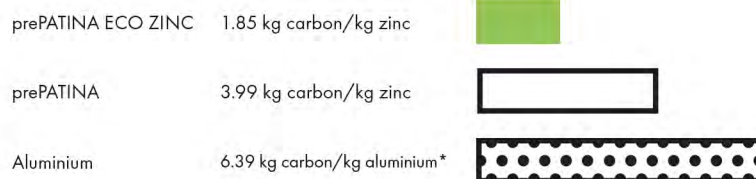
RHEINZINK has had an environmental product declaration drawn up for its products in accordance with internationally recognised standards.<sup>2</sup> The result shows a carbon emission of 3.99 kg carbon/kg for pre-weathered titanium zinc sheet, which corresponds to the highest finishing level. For comparison: Using the same methodology as for pre-weathered zinc, the carbon emissions for strip-coated aluminium sheet are 6.39 kg carbon/kg. This resulted in very good comparative values even before the changeover to prePATINA ECO ZINC.

2: Data from IBU EPDs according to ISO 14025 and EN 15804; in each case including recycling credits



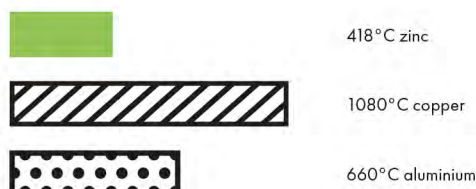
## prePATINA ECO ZINC IN FIGURES

Carbon footprints in comparison



## MELTING POINTS

Construction metals in comparison



\*Aluminium of IBU EPD from GDA (today Aluminium Deutschland) for "cold-formed aluminium sheet in outdoor applications", valid until 2025.

### 100% recyclability

What many call recycling is often merely downcycling. For RHEINZINK, we therefore speak more appropriately of the Cradle to Cradle principle. After its use, titanium zinc can be correctly sorted by type without effort and reused an infinite number of times in its original quality. Therefore, RHEINZINK products basically have an eternal life.

### Extremely durable

Only a truly durable material can also be sustainable. The search for such products and real quality has developed in recent years as a counter-trend to the throwaway society. A lot will change in 50, 100 or even 200 years. RHEINZINK titanium zinc stays what it is during the whole time – and gains aesthetic quality with every year.

Service life with professional installation

# 100 years

# THE MOST SUSTAINABLE CONSTRUCTION ZINC IN THE WORLD.

50%  
LESS  
CO<sub>2</sub>

prePATINA

ECO ZINC

**prePATINA becomes prePATINA ECO ZINC  
with 50% less carbon.**

With prePATINA ECO ZINC, we are taking a big step forward on the path to decarbonisation. We are the first manufacturer of construction zinc to reduce carbon emissions by 50%. We make sustainability real: with real renewable energies – certified and without compensation.



EXTREMELY  
DURABLE



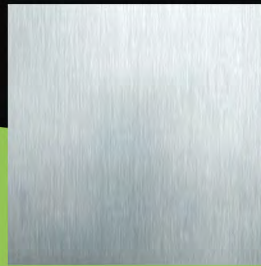
PRACTICALLY  
MAINTENANCE-  
FREE



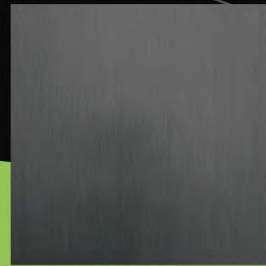
100%  
RECYCLABLE



NATURALLY  
SUSTAINABLE



blue-grey



graphite-grey



## CONCRETE CARBON SAVINGS

prePATINA ECO ZINC

**12.0 kg carbon**

per m<sup>2</sup> of standing seam roof

**3.6 kg carbon**

per running metre of gutter



## EXCELLENT ECO BALANCE

RHEINZINK is quality for the future. This is confirmed by the many certification marks the material has been awarded. They document what architects, fabricators and builders have seen confirmed in practice for decades.

### RHEINZINK is Cradle to Cradle Certified

The non-profit institute EPEA tests material health, recyclability the use of renewable energy, the responsible use of water and social justice of RHEINZINK every two years in the form of the Cradle to Cradle seal. RHEINZINK has been certified according to the Cradle to Cradle criteria since 2009. This certification applies to all RHEINZINK roof and façade products, including the complete roof drainage system from the RHEINZINK-CLASSIC and RHEINZINK-prePATINA ECO ZINC product lines.



Please find more information and inspiration at [www.rheinzink.com](http://www.rheinzink.com)

RHEINZINK GmbH & Co. KG · P.O. box 1452 · 45705 Datteln · Germany · Tel.: +49 2363 605-0 · [info@rheinzink.de](mailto:info@rheinzink.de)